

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

1 of 12

**Complete if Known**

|                        |                        |
|------------------------|------------------------|
| Application Number     | 10/660,996             |
| Filing Date            | 09/12/2003             |
| First Named Inventor   | David J. Ecker         |
| Art Unit               | 1637                   |
| Examiner Name          | Jeffrey Norman Fredman |
| Attorney Docket Number | DIBIS-0002US.P4        |

**U.S. PATENT DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Document Number                           | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of<br>Cited Document | Pages, Columns, Lines, Where Relevant<br>Passages or Relevant<br>Figures Appear |
|---------------------|-----------------------|---|--------------------------------|--|---|
|                     |                       | Number - Kind Code <sup>2</sup> (# known) |                                |  |   |
| CP                  | US-5,484,908          |   | 01-16-1996                     | Froehler et al.                                    |   |
| CQ                  | US-5,502,177          |   | 03-26-1996                     | Mattucci et al.                                    |   |
| CR                  | US-5,503,980          |   | 04-02-1996                     | Cantor   |   |
| CS                  | US-5,527,675          |   | 06-18-1996                     | Coull et al.                                       |   |
| CT                  | US-5,580,733          |   | 12-03-1996                     | Levis et al.                                       |   |
| CU                  | US-5,625,184          |   | 04-29-1997                     | Vestal et al.                                      |   |
| CV                  | US-5,645,985          |   | 07-08-1997                     | Froehler et al.                                    |   |
| CW                  | US-5,686,242          |   | 11-11-1997                     | Bruice et al.                                      |   |
| CX                  | US-5,700,642          |   | 12-23-1997                     | Monforte et al.                                    |   |
| CY                  | US-5,759,771          |   | 03-02-1998                     | Tilanus  |   |
| CZ                  | US-5,763,588          |   | 07-09-1998                     | Mattucci et al.                                    |   |
| DA                  | US-5,770,367          |   | 06-23-1998                     | Southern et al.                                    |   |
| DB                  | US-5,777,324          |   | 07-07-1998                     | Hillenkamp   |   |
| DC                  | US-5,830,653          |   | 11-03-1998                     | Froehler et al.                                    |   |
| DD                  | US-5,830,655          |   | 11-03-1998                     | Monforte et al.                                    |   |
| DE                  | US-5,851,765          |   | 12-22-1998                     | Koster   |   |
| DF                  | US-5,864,137          |   | 01-26-1999                     | Becker et al.                                      |   |
| DG                  | US-5,869,242          |   | 02-09-1999                     | Kamb   |   |
| DH                  | US-5,871,697          |   | 02-16-1999                     | Rothberg et al.                                    |   |
| DI                  | US-5,876,936          |   | 03-02-1999                     | Ju   |   |
| DJ                  | US-5,928,906          |   | 07-27-1999                     | Koster et al.                                      |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document  | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>3</sup> |
|--------------------|-----------------------|--|--------------------------------|---|--|----------------|
|                    |                       | Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (# known) |                                |   |  |                |
| DK                 |                       | DE19802905   | 07-29-1999                     | Bruker Daltonik                                       |  |                |
| DL                 |                       | DE19824280   | 12-02-1999                     | Bruker Daltonik                                       |  |                |
| DM                 |                       | DE19852167   | 05-31-2000                     | Bruker Saxonia  |  |                |
| DN                 |                       | EP1138782  | 10-14-2001                     | Bruker Saxonia  |  |                |
| DO                 |                       | EP1234888  | 08-28-2002                     | Bruker Saxonia  |  |                |
| DP                 |                       | EP1333101  | 08-06-2003                     | Bruker Daltonik                                       |  |                |
| DQ                 |                       | GB2325002  | 11-11-1998                     | Bruker Franzen  |  |                |
| DR                 |                       | GB2339905  | 02-09-2000                     | Bruker Daltonik                                       |  |                |
| DS                 |                       | WO 93/03186  | 02-18-1993                     | Hoffman-La Roche                                      |  |                |
| DT                 |                       | WO 94/16101  | 07-21-1994                     | Koster  |  |                |

Examiner Signature

/Jeffrey Fredman/

Date Considered

07/05/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

2

of

12

**Complete If Known**

|                        |                        |
|------------------------|------------------------|
| Application Number     | 10/660,996             |
| Filing Date            | 09/12/2003             |
| First Named Inventor   | David J. Ecker         |
| Art Unit               | 1637                   |
| Examiner Name          | Jeffrey Norman Fredman |
| Attorney Docket Number | DIBIS-0002US.P4        |

**U.S. PATENT DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Document Number                            | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of<br>Cited Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear |
|---------------------|-----------------------|--|--------------------------------|--|--|
|                     |                       | Number - Kind Code <sup>2</sup> (if known) |                                |  |  |
| DU                  | US-5,981,176          |  | 11-09-1999                     | Wallace  |  |
| DV                  | US-5,994,066          |  | 11-30-1999                     | Bergeron et al.                                    |  |
| DW                  | US-6,001,564          |  | 12-14-1999                     | Bergeron et al.                                    |  |
| DX                  | US-6,005,096          |  | 12-21-1999                     | Matteucci et al.                                   |  |
| DY                  | US-6,007,992          |  | 12-28-1999                     | Lin et al.   |  |
| DZ                  | US-6,028,183          |  | 02-22-2000                     | Lin et al.   |  |
| EA                  | US-6,046,005          |  | 04-04-2000                     | Ju et al.  |  |
| EB                  | US-6,051,378          |  | 04-18-2000                     | Monforte et al.                                    |  |
| EC                  | US-6,054,278          |  | 04-25-2000                     | Dodge et al.                                       |  |
| ED                  | US-6,074,823          |  | 06-13-2000                     | Koster   |  |
| EE                  | US-6,090,558          |  | 07-18-2000                     | Butler et al.                                      |  |
| EF                  | US-6,104,028          |  | 08-15-2000                     | Hunter et al.                                      |  |
| EG                  | US-6,111,251          |  | 08-29-2000                     | Hillenkamp   |  |
| EH                  | US-6,140,053          |  | 10-31-2000                     | Koster   |  |
| EI                  | US-6,146,144          |  | 11-14-2000                     | Fowler et al.                                      |  |
| EJ                  | US-6,153,389          |  | 11-28-2000                     | Haarer et al.                                      |  |
| EK                  | US-6,159,681          |  | 12-12-2000                     | Zebala   |  |
| EL                  | US-6,180,372          |  | 01-30-2001                     | Franzen  |  |
| EM                  | US-6,194,144          |  | 02-27-2001                     | Koster   |  |
| EN                  | US-6,197,498          |  | 03-03-2001                     | Koster   |  |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>4</sup> |
|---------------------|-----------------------|---|--------------------------------|---|--|----------------|
|                     |                       | Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known) |                                |   |  |                |
| EO                  |                       | WO 97/21822   | 09-24-1994                     | Koster  |  |                |
| EP                  |                       | WO 96/29431   | 09-26-1996                     | Sequenom  |  |                |
| EQ                  |                       | WO 96/32504   | 10-17-1996                     | Trust. of Boston                                      |  |                |
| ER                  |                       | WO 96/37630   | 11-28-1996                     | SRI International                                     |  |                |
| ES                  |                       | WO 98/03684   | 01-29-1998                     | Hybridon Inc.   |  |                |
| ET                  |                       | WO 98/14616   | 04-09-1998                     | Perceptive Bio.                                       |  |                |
| EU                  |                       | WO 98/15652   | 04-16-1998                     | Brax Genomics   |  |                |
| EV                  |                       | WO 98/20020   | 05-14-1998                     | Sequenom Inc.   |  |                |
| EW                  |                       | WO 98/20157   | 05-14-1998                     | Infectio Diagnost.                                    |  |                |
| EX                  |                       | WO 98/26095   | 06-18-1998                     | Genetrace Sys.  |  |                |

Examiner Signature

/Jeffrey Fredman/

Date Considered

07/05/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

3 of 12

**Complete If Known**

|                        |                        |
|------------------------|------------------------|
| Application Number     | 10/660,996             |
| Filing Date            | 09/12/2003             |
| First Named Inventor   | David J. Ecker         |
| Art Unit               | 1637                   |
| Examiner Name          | Jeffrey Norman Fredman |
| Attorney Docket Number | DIBIS-0002US.P4        |

**U.S. PATENT DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Document Number                            | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of<br>Cited Document | Pages, Columns, Lines, Where Relevant<br>Passages or Relevant<br>Figures Appear |
|---------------------|-----------------------|--|--------------------------------|--|---|
|                     |                       | Number - Kind Code <sup>2</sup> (if known) |                                |  |   |
| EY                  | US-6,218,118          |  | 04-17-2001                     | Sampson et al.                                     |   |
| EZ                  | US-6,221,601          |  | 04-24-2001                     | Koster et al.                                      |   |
| FA                  | US-6,221,605          |  | 04-24-2001                     | Koster   |   |
| FB                  | US-6,225,450          |  | 05-01-2001                     | Koster   |   |
| FC                  | US-6,235,476          |  | 05-22-2001                     | Bergmann et al.                                    |   |
| FD                  | US-6,235,478          |  | 05-22-2001                     | Koster   |   |
| FE                  | US-6,235,480          |  | 05-22-2001                     | Shultz et al.                                      |   |
| FF                  | US-6,238,871          |  | 05-29-2001                     | Koster   |   |
| FG                  | US-6,238,927          |  | 05-29-2001                     | Abrams et al.                                      |   |
| FH                  | US-6,258,538          |  | 07-10-2001                     | Koster et al.                                      |   |
| FI                  | US-6,265,716          |  | 07-24-2001                     | Hunter et al.                                      |   |
| FJ                  | US-6,268,129          |  | 07-31-2001                     | Gut et al.   |   |
| FK                  | US-6,268,131          |  | 07-31-2001                     | Kang et al.  |   |
| FL                  | US-6,268,144          |  | 07-31-2001                     | Koster   |   |
| FM                  | US-6,268,146          |  | 07-31-2001                     | Shultz et al.                                      |   |
| FN                  | US-6,270,973          |  | 08-07-2001                     | Lewis et al.                                       |   |
| FO                  | US-6,270,974          |  | 08-07-2001                     | Shultz et al.                                      |   |
| FP                  | US-6,277,573          |  | 08-21-2001                     | Koster   |   |
| FQ                  | US-6,277,578          |  | 08-21-2001                     | Shultz et al.                                      |   |
| FR                  | US-6,300,076          |  | 10-09-2001                     | Koster   |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>6</sup> |
|---------------------|-----------------------|---|--------------------------------|---|--|----------------|
|                     |                       | Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known) |                                |   |  |                |
| FS                  | WO 98/1830            |   | 07-23-1998                     | Brax Genomics   |  |                |
| FT                  | WO 98/40520           |   | 09-17-1998                     | Hybridon Inc.   |  |                |
| FU                  | WO 99/05319           |   | 02-04-1999                     | Rapigene, Inc.  |  |                |
| FV                  | WO 99/29898           |   | 06-17-1999                     | Max-Planck  |  |                |
| FW                  | WO 99/57318           |   | 11-11-1999                     | Sequenom Inc.   |  |                |
| FX                  | WO 01/07648           |   | 02-01-2001                     | Artus Gesell.   |  |                |
| *                   | FY                    | WO 01/23604   | 04-05-2001                     | Infectio Diagnost.                                    |  |                |
| FZ                  | WO 01/32930           |   | 05-10-2001                     | California Instit.                                    |  |                |
| GA                  | WO 01/51661           |   | 07-19-2001                     | Amsterdam Support                                     |  |                |
| GB                  | WO 01/57263           |   | 08-09-2001                     | Adrevion Biosci.                                      |  |                |

\* A copy of this reference will not be forwarded to the U.S. Patent and Trademark Office since it is believed to be too voluminous and easily obtainable by the Examiner.

|                    |                   |                 |            |
|--------------------|-------------------|-----------------|------------|
| Examiner Signature | /Jeffrey Fredman/ | Date Considered | 07/05/2007 |
|--------------------|-------------------|-----------------|------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional). \*See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. \*Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). \*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments or the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

4

of

12

| Complete If Known      |                        |
|------------------------|------------------------|
| Application Number     | 10/660,996             |
| Filing Date            | 09/12/2003             |
| First Named Inventor   | David J. Ecker         |
| Art Unit               | 1637                   |
| Examiner Name          | Jeffrey Norman Fredman |
| Attorney Docket Number | DIBIS-0002US.P4        |

**U.S. PATENT DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Document Number                            | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of<br>Cited Document | Pages, Columns, Lines, Where Relevant<br>Passages or Relevant<br>Figures Appear |
|---------------------|-----------------------|--|--------------------------------|--|---|
|                     |                       | Number - Kind Code <sup>2</sup> (if known) |                                |  |   |
| GC                  | US-6,312,893          |  | 11-06-2001                     | Van Ness et al.                                    |   |
| GD                  | US-6,312,902          |  | 11-06-2001                     | Shultz et al.                                      |   |
| GE                  | US-6,361,940          |  | 03-26-2002                     | Van Ness et al.                                    |   |
| GF                  | US-6,372,424          |  | 04-16-2002                     | Brow et al.  |   |
| GG                  | US-6,391,551          |  | 05-21-2002                     | Shultz et al.                                      |   |
| GH                  | US-6,423,966          |  | 07-23-2002                     | Hillenkamp et al.                                  |   |
| GI                  | US-6,428,955          |  | 08-06-2002                     | Koster et al.                                      |   |
| GJ                  | US-6,432,651          |  | 08-13-2002                     | Hughes et al.                                      |   |
| GK                  | US-6,436,635          |  | 08-20-2002                     | Fu et al.  |   |
| GL                  | US-6,436,640          |  | 08-20-2002                     | Simmonds et al.                                    |   |
| QM                  | US-6,458,533          |  | 10-01-2002                     | Felder et al.                                      |   |
| GN                  | US-6,468,748          |  | 10-22-2002                     | Monforte et al.                                    |   |
| GO                  | US-6,475,736          |  | 11-05-2002                     | Stanton, Jr.                                       |   |
| GP                  | US-6,479,239          |  | 11-12-2002                     | Anderson et al.                                    |   |
| GQ                  | US-6,500,621          |  | 12-31-2002                     | Koster   |   |
| GR                  | US-6,558,902          |  | 05-06-2003                     | Hillenkamp   |   |
| GS                  | US-6,566,055          |  | 05-20-2003                     | Monforte et al.                                    |   |
| GT                  | US-6,582,916          |  | 06-24-2003                     | Schmidt et al.                                     |   |
| GU                  | US-6,589,485          |  | 07-08-2003                     | Koster   |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|---|--------------------------------|---|--|----------------|
|                    |                       | Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known) |                                |   |  |                |
| GV                 |                       | WO 02/10186   | 02-07-2002                     | California Inst.                                      |  |                |
| GW                 |                       | WO 02/18641   | 03-07-2002                     | Sequenom-Gemini                                       |  |                |
| GX                 |                       | WO 02/21108   | 03-14-2002                     | Large Scale   |  |                |
| GY                 |                       | WO 02/50307   | 06-27-2002                     | Chugai Seiyaku  |  |                |
| GZ                 |                       | WO 02/57491   | 07-25-2002                     | Board of Trustees<br>of the Leland                    |  |                |
| HA                 |                       | WO 02/077278  | 10-03-2002                     | Council of<br>Scientific                              |  |                |
| HB                 |                       | WO 02/099034  | 12-12-2002                     | Infection Diagnostic                                  |  |                |
| HC                 |                       | WO 03/002750  | 01-09-2003                     | High Throughput                                       |  |                |
| HD                 |                       | WO 03/008636  | 01-30-2003                     | Infectio Diagnost.                                    |  |                |
| HE                 |                       | WO 03/016546  | 02-27-2003                     | Flinders Technol.                                     |  |                |

|                    |                   |                 |            |
|--------------------|-------------------|-----------------|------------|
| Examiner Signature | /Jeffrey Fredman/ | Date Considered | 07/05/2007 |
|--------------------|-------------------|-----------------|------------|

\*EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.<sup>1</sup> Applicant's unique citation designation number (optional).<sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

5

of 12

| Complete If Known      |                        |
|------------------------|------------------------|
| Application Number     | 10/660,998             |
| Filing Date            | 09/12/2003             |
| First Named Inventor   | David J. Ecker         |
| Art Unit               | 1637                   |
| Examiner Name          | Jeffrey Norman Fredman |
| Attorney Docket Number | DIBIS-0002US.P4        |

## U.S. PATENT DOCUMENTS

| Examiner Initials * | Cite No. <sup>1</sup> | Document Number                            | Publication Date<br>MM-DD-YYYY | Name of Patentee or Applicant of<br>Cited Document | Pages, Columns, Lines, Where Relevant<br>Passages or Relevant<br>Figures Appear |
|---------------------|-----------------------|--|--------------------------------|--|---|
|                     |                       | Number - Kind Code <sup>2</sup> (if known) |                                |  |   |
| HF                  | US-6,602,668          |  | 08-05-2003                     | Koster   |   |
| HG                  | US-6,605,433          |  | 08-12-2003                     | Fliss et al.                                       |   |
| HH                  | US-6,623,928          |  | 09-23-2003                     | Van Ness et al.                                    |   |
| HI                  | US-6,682,889          |  | 08-12-2003                     | Fliss et al.                                       |   |
| HJ                  | US-6,716,634          |  | 04-06-2004                     | Myerson  |   |
| HK                  | US-2002/0045178       |  | 04-18-2002                     | Cantor et al.                                      |   |
| HL                  | US-2002/0137057       |  | 09-26-2002                     | Wold et al.  |   |
| HM                  | US-2002/0150903       |  | 10-17-2002                     | Koster   |   |
| HN                  | US-2002/0150927       |  | 10-17-2002                     | Matray et al.                                      |   |
| HO                  | US-2002/0168630       |  | 11-14-2002                     | Fleming et al.                                     |   |
| HP                  | US-2003/0017487       |  | 01-23-2003                     | Xde et al.   |   |
| HQ                  | US-2003/0039976       |  | 02-27-2003                     | Haff   |   |
| HR                  | US-2003/0064483       |  | 04-03-2003                     | Shaw et al.  |   |
| HS                  | US-2003/0073112       |  | 04-17-2003                     | Zhang et al.                                       |   |
| HT                  | US-2003/0113745       |  | 06-19-2003                     | Monforte et al.                                    |   |
| HU                  | US-2003/0129589       |  | 07-10-2003                     | Koster et al.                                      |   |
| HV                  | US-2003/0134312       |  | 07-17-2003                     | Burgoyne   |   |
| HW                  | US-2003/0148284       |  | 08-07-2003                     | Vision et al.                                      |   |
| HX                  | US-2003/0175729       |  | 09-18-2003                     | Van Eijk et al.                                    |   |
| HY                  | US-2003/0194699       |  | 10-16-2003                     | Lewis et al.                                       |   |
| HZ                  | US-2003/0203398       |  | 10-30-2003                     | Bramucci et al.                                    |   |
| IA                  | US-2003/0220844       |  | 11-27-2003                     | Marello et al.                                     |   |
| IB                  | US-2004/0005555       |  | 01-08-2004                     | Rothman et al.                                     |   |
| IC                  | US-2004/0038206       |  | 02-26-2004                     | Zhang et al.                                       |   |
| ID                  | US-2004/0038234       |  | 02-26-2004                     | Gut et al.   |   |
| IE                  | US-2004/0038385       |  | 02-26-2004                     | Langlois et al.                                    |   |

## FOREIGN PATENT DOCUMENTS

| Examiner Initials * | Cite No. <sup>1</sup> | Foreign Patent Document   | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited<br>Document | Pages, Columns, Lines,<br>Where Relevant<br>Passages or Relevant<br>Figures Appear | T <sup>6</sup> |
|---------------------|-----------------------|---|--------------------------------|---|--|----------------|
|                     |                       | Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known) |                                |   |  |                |
| IF                  |                       | WO 03/060163  | 07-24-2003                     | Keygene N.V.  |  |                |
| IG                  |                       | WO 03/088979  | 10-30-2003                     | Centre National                                       |  |                |
| IH                  |                       | WO 03/097869  | 11-27-2003                     | Con/Cipio GmbH  |  |                |

Examiner Signature

/Jeffrey Fredman/

Date Considered

07/05/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

6 of 12

**Complete If Known**

|                               |                        |
|-------------------------------|------------------------|
| <i>Application Number</i>     | 10/860,996             |
| <i>Filing Date</i>            | 09/12/2003             |
| <i>First Named Inventor</i>   | David J. Ecker         |
| <i>Art Unit</i>               | 1637                   |
| <i>Examiner Name</i>          | Jeffrey Norman Fredman |
| <i>Attorney Docket Number</i> | DIBIS-0002US.P4        |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.                                   | T <sup>2</sup> |
|---------------------|-----------------------|---|----------------|
|                     | II                    | BAHRMAND, A. R. et al., "Use of restriction enzyme analysis of amplified DNA coding for the hsp65 gene and polymerase chain reaction with universal primer for rapid differentiation of mycobacterium species in the clinical laboratory," <i>Scand. J. Infect. Diseases</i> (1998) 30(5):477-80. |                |
|                     | IJ                    | BAHRMAND, A. R. et al., "Polymerase chain reaction of bacterial genomes with single universal primer: application to distinguishing mycobacteria species," <i>Mol. Cell. Probes</i> (1996) 10(2):117-122.   |                |
|                     | IK                    | BASTIA, T. et al., "Organelle DNA analysis of Solanum and Brassica somatic hybrids by PCR with 'universal primers,'" <i>Theoretical and Applied Genetics</i> (2001) 102(8):1265-1272.   |                |
|                     | IL                    | BOIVIN-JAHNS, V. et al., "Bacterial Diversity in a Deep-Subsurface Clay Environment," <i>Appl. Environ. Microbiol.</i> (1996) 62(9):3405-3412.  |                |
|                     | IM                    | BOWEN, J. E. et al., "The native virulence plasmid combination affects the segregational stability of a theta-replicating shuttle vector in <i>Bacillus anthracis</i> var. New Hampshire," <i>J Appl Microbiol.</i> (1999) 87(2):270-278.   |                |
|                     | IN                    | CESPEDES, A. et al., "Polymerase chain reaction restriction fragment length polymorphism analysis of a short fragment of the cytochrome b gene for identification of flatfish species," <i>J. Food Protection</i> (1998) 61(12):1684-1685.  |                |
|                     | IO                    | CHEN, C. A. et al., "Universal primers for amplification of mitochondrial small subunit ribosomal RNA-encoding gene in scleractinian corals," <i>Marine Biotech.</i> (2000) 2(2):146-153.   |                |
|                     | IP                    | CHO, M. et al., "Application of the ribonuclease P (RNase P) RNA gene sequence for phylogenetic analysis of the genus <i>Saccharomonospora</i> ," <i>Internat. J. of Sys. Bacteriol.</i> (1998) 48:1223-1230.   |                |
|                     | IQ                    | CORNEL, A. J. et al., "Polymerase chain reaction species diagnostic assay for <i>Anopheles quadrimaculatus</i> cryptic species (Diptera: Culicidae) based on ribosomal DNA ITS2 sequences," <i>Journal of Medical Entomology</i> (1996) 33(1):109-116.  |                |
|                     | IR                    | CRAIN, P. F. et al., "Applications of mass spectrometry to the characterization of oligonucleotides and nucleic acids," <i>Curr Opin Biotechnol.</i> (1998) 9(1):25-34.   |                |
|                     | IS                    | CRESPILE, M. et al., "Mitochondrial DNA sequences for 118 individuals from northeastern Spain," <i>Int. J. Legal Med.</i> (2000) 114:130-132.   |                |
|                     | IT                    | DEFORCE, D. L. et al., "Analysis of oligonucleotides by ESI-MS," <i>Advances in Chromatography</i> (2000) 40:539-566.   |                |

|                    |                   |                 |            |
|--------------------|-------------------|-----------------|------------|
| Examiner Signature | /Jeffrey Fredman/ | Date Considered | 07/05/2007 |
|--------------------|-------------------|-----------------|------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

7

of

12

**Complete If Known**

|                        |                        |
|------------------------|------------------------|
| Application Number     | 10/660,996             |
| Filing Date            | 09/12/2003             |
| First Named Inventor   | David J. Ecker         |
| Art Unit               | 1637                   |
| Examiner Name          | Jeffrey Norman Fredman |
| Attorney Docket Number | DIBIS-0002US.P4        |

| NON PATENT LITERATURE DOCUMENTS |                       |   |
|---------------------------------|-----------------------|---|
| Examiner Initials *             | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.               |
|                                 | IU                    | DIAS NETO, E. et al., "Shotgun sequencing of the human transcriptome with ORF expressed sequence tags," <i>PNAS</i> (2000) 97(7):3491-3496.   |
|                                 | IV                    | DINAUER, D. M. et al., "Sequence-based typing of HLA class II DQB1," <i>Tissue Antigens</i> (2000) 55(4):364-368.   |
|                                 | IW                    | DUBERNET, S. et al., "A PCR-based method for identification of Lactobacilli at the genus level," <i>FEMS Microbiology Letters</i> (2002) 214(2):271-275.  |
|                                 | IX                    | FIGUEIREDO, L. T. M. et al., "Identification of Brazilian flaviviruses by a simplified reverse transcription-polymerase chain reaction method using Flavivirus universal primers," <i>American Journal of Tropical Medicine and Hygiene</i> (1998) 59(3):357-362.             |
|                                 | IY                    | FOX, A. et al., "Identification and detection of bacteria: electrospray MS-MS versus derivatization/GC-MS," <i>Proceedings of the ERDEC Scientific Conference on Chemical and Biological Defense Research</i> (1994) Aberdeen Proving Ground, Md., Nov. 15-18, p. 39-44.      |
|                                 | IZ                    | FUJIOKA, S. et al., "Analysis of enterovirus genotypes using single-strand conformation polymorphisms of polymerase chain reaction products," <i>J. Virol. Meth.</i> (1995) 51:253-258.   |
|                                 | JA                    | GATTERMANN, N. et al., "Heteroplasmic Point Mutations of Mitochondrial DNA Affecting Subunit I of Cytochrome c Oxidase in Two Patients with Acquired Idiopathic Sideroblastic Anemia," <i>Blood</i> (1997) 90(12):4961-4972.  |
|                                 | JB                    | GRIFFIN, T. J. et al., "Single-nucleotide polymorphism analysis by MALDI-TOF mass spectrometry," <i>Trends in Biotechnology</i> (2000) 18(2):77-84.   |
|                                 | JC                    | HAHNER, S. et al., "Analysis of short tandem repeat polymorphisms by electrospray ion trap mass spectrometry," <i>Nucleic Acids Res.</i> (2000) 28(18):E82.   |
|                                 | JD                    | HANNIS, J. C. et al., "Genotyping complex short tandem repeats using electrospray ionization Fourier transform ion cyclotron resonance multistage mass spectrometry," <i>Proceedings of SPIE-The International Society for Optical Engineering</i> (2000) 3926:36-47.         |
|                                 | JE                    | HENCHAL, E. A. et al., "Sensitivity and specificity of a universal primer set for the rapid diagnosis of dengue virus infections by polymerase chain reaction and nucleic acid hybridization," <i>American Journal of Tropical Medicine and Hygiene</i> (1991) 45(4):418-428. |
|                                 | JF                    | HEREMANN, B. et al., "Differentiation of <i>Chlamydia</i> spp. by Sequence Determination and Restriction Endonuclease Cleavage of RNase P RNA Genes," <i>J. Clin. Microbiol.</i> (1996) 34(8):1897-1902.  |

|                    |                   |                 |            |
|--------------------|-------------------|-----------------|------------|
| Examiner Signature | /Jeffrey Fredman/ | Date Considered | 07/05/2007 |
|--------------------|-------------------|-----------------|------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached. This collection of Information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

8 of 12

**Complete If Known**

|                               |                        |
|-------------------------------|------------------------|
| <i>Application Number</i>     | 10/660,996             |
| <i>Filing Date</i>            | 09/12/2003             |
| <i>First Named Inventor</i>   | David J. Ecker         |
| <i>Art Unit</i>               | 1637                   |
| <i>Examiner Name</i>          | Jeffrey Norman Fredman |
| <i>Attorney Docket Number</i> | DIBIS-0002US.P4        |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.  | T <sup>2</sup> |
|---------------------|-----------------------|--|----------------|
|                     | JG                    | HIGGINS, C. S. et al., "Competitive oligonucleotide single-base extension combined with mass spectrometric detection for mutation screening," <i>BioTechniques</i> (1997) 23(4):710-714.   |                |
|                     | JH                    | HONDA, K. et al., "Universal method of hypersensitive nested PCR toward forensic DNA typing," <i>International Congress Series</i> (1998) 7:28-30.   |                |
|                     | JI                    | HURST, G. B. et al., "MALDI-TOF analysis of polymerase chain reaction products from methanotrophic bacteria," <i>Anal. Chem.</i> , (1998) 70(13):2693-2698.  |                |
|                     | JJ                    | JOHNSON, Y. A. et al., "Precise molecular weight determination of PCR products of the rRNA intergenic spacer region using electrospray quadrupole mass spectrometry for differentiation of <i>B. subtilis</i> and <i>B. atrophaeus</i> , closely related species of bacilli," <i>J. Microbiol. Methods</i> (2000) 40(3):241-254. |                |
|                     | JK                    | JURINKO, C. et al., "Detection of hepatitis B virus DNA in serum samples via nested PCR and MALDI-TOF mass spectrometry," <i>Genetic Analysis: Biomolecular Engineering</i> (1996) 13:67-71.   |                |
|                     | JL                    | KILPATRICK, D. R. et al., "Group-Specific Identification of Polioviruses by PCR Using Primers Containing Mixed-Base or Deoxyinosine Residues at Positions of Codon Degeneracy," <i>J. Clin. Microbiol.</i> (1996) 34(12):2990-2996.  |                |
|                     | JM                    | KRAHMER, M. T. et al., "Electrospray quadrupole mass spectrometry analysis of model oligonucleotides and polymerase chain reaction products: determination of base substitutions, nucleotide additions/deletions, and chemical modifications," <i>Anal. Chem.</i> (1999) 71(14):2893-2900.                                       |                |
|                     | JN                    | KRAHMER, M. T. et al., "MS for identification of single nucleotide polymorphisms and MS/MS for discrimination of isomeric PCR products," <i>Anal. Chem.</i> (2000) 72(17):4033-4040.   |                |
|                     | JO                    | LACROIX, J.-M. et al., "PCR-based technique for the detection of bacteria in semen and urine," <i>J. Microbiol. Methods</i> (1996) 26:61-71.   |                |
|                     | JP                    | LEIF, H. et al., "Isolation and characterization of the proton-translocating NADH: ubiquinone oxidoreductase from <i>Escherichia coli</i> ," <i>Eur. J. Biochem.</i> (1995) 230(2):538-548.  |                |
|                     | JQ                    | LI, J. et al., "Single nucleotide polymorphism determination using primer extension and time-of-flight mass spectrometry," <i>Electrophoresis</i> (1999) 20(6):1258-1265.  |                |
|                     | JR                    | LIU, Y. et al., "An unusual gene arrangement for the putative chromosome replication origin and circadian expression of <i>dnaN</i> in <i>Synechococcus</i> sp. strain PCC 7942," <i>Gene</i> (1996) 172(N):105-109.   |                |

|                    |                   |                 |            |
|--------------------|-------------------|-----------------|------------|
| Examiner Signature | /Jeffrey Fredman/ | Date Considered | 07/05/2007 |
|--------------------|-------------------|-----------------|------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

9

of

12

**Complete If Known**

|                               |                        |
|-------------------------------|------------------------|
| <i>Application Number</i>     | 10/660,996             |
| <i>Filing Date</i>            | 09/12/2003             |
| <i>First Named Inventor</i>   | David J. Ecker         |
| <i>Art Unit</i>               | 1637                   |
| <i>Examiner Name</i>          | Jeffrey Norman Fredman |
| <i>Attorney Docket Number</i> | DIBIS-0002US.P4        |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.   | T <sup>2</sup> |
|---------------------|-----------------------|---|----------------|
|                     | JS                    | LOAKES, D. et al., "Nitroindoles as Universal Bases," <i>Nucleosides Nucleotides</i> (1995) 14:1001-1003.   |                |
|                     | JT                    | LOVE, B. C. et al., "Cloning and sequence of the <i>groESL</i> heat-shock operon of <i>Pasteurella multocida</i> ," <i>Gene</i> (1995) 166(1):179-180.  |                |
|                     | JU                    | MAIWALD, M. et al., "Characterization of contaminating DNA in Taq polymerase which occurs during amplification with a primer set for Legionella 5S ribosomal RNA," <i>Mol. Cell. Probes</i> (1994) 8(1):11-14.  |                |
|                     | JV                    | MARTEMYANOV, K. A. et al., "Extremely Thermostable Elongation Factor G from <i>Aquifex aeolicus</i> : Cloning, Expression, Purification, and Characterization in a Heterologous Translation System," <i>Protein Expr. Purif.</i> (2000) 18(3):257-261.  |                |
|                     | JW                    | MATRAY, T. J. et al., "Synthesis and properties of RNA analogs - oligoribonucleotide N3'→P5' phosphoramidates," <i>Nucleic Acids Res.</i> (1999) 27(20):3976-3985.  |                |
|                     | JX                    | MESSMER, T. O. et al., "Discrimination of <i>Streptococcus pneumoniae</i> from other upper respiratory tract streptococci by arbitrarily primed PCR," <i>Clin. Biochem.</i> (1995) 28(6):567-572.   |                |
|                     | JY                    | MORSE, R. et al., "Nucleotide Sequence of Part of the <i>ropC</i> Gene Encoding the β' Subunit of DNA-Dependent RNA Polymerase from some Gram-Positive Bacteria and Comparative Amino Acid Sequence Analysis," <i>System Appl. Microbiol.</i> (1995) 19:150-157.  |                |
|                     | JZ                    | MUDDIMAN, D. C. et al., "Application of secondary ion and matrix-assisted laser desorption-ionization time-of-flight mass spectrometry for the quantitative analysis of biological molecules," <i>Mass Spectrometry Reviews</i> (1996) 14(6):383-429.   |                |
|                     | KA                    | MUDDIMAN, D. C. et al., "Important aspects concerning the quantification of biomolecules by time-of-flight secondary-ion mass spectrometry," <i>Applied Spectroscopy</i> (1996) 50(2):161-166.  |                |
|                     | KB                    | MUHAMMAD, W. T. et al., "Electrospray ionization quadrupole time-of-flight mass spectrometry and quadrupole mass spectrometry for genotyping single nucleotide substitutions in intact polymerase chain reaction products in K-ras and p53," <i>Rapid Commun. Mass Spectrom.</i> (2002) 16(24):2278-2285. |                |
|                     | KC                    | MUSHEGIAN, A. R. et al., "A minimal gene set for cellular life derived by comparison of complete bacterial genomes," <i>Proc. Natl. Acad. Sci. USA</i> (1996) 93(19):10268-10273.   |                |
|                     | KD                    | NAKAO, H. et al., "Development of a Direct PCR Assay for Detection of the Diphtheria Toxin Gene," <i>J. Clin. Microbiol.</i> (1997) 35(7):1651-1655.  |                |

|                    |                   |                 |            |
|--------------------|-------------------|-----------------|------------|
| Examiner Signature | /Jeffrey Fredman/ | Date Considered | 07/05/2007 |
|--------------------|-------------------|-----------------|------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

10

of

12

**Complete If Known**

|                        |                        |
|------------------------|------------------------|
| Application Number     | 10/660,996             |
| Filing Date            | 09/12/2003             |
| First Named Inventor   | David J. Ecker         |
| Art Unit               | 1637                   |
| Examiner Name          | Jeffrey Norman Fredman |
| Attorney Docket Number | DIBIS-0002US.P4        |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (In CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.                      | T <sup>2</sup> |
|---------------------|-----------------------|--|----------------|
|                     | KE                    | NAUMOV, G. I. et al., "Discrimination between the soil yeast species <i>Williopsis saturnus</i> and <i>Williopsis suaveolens</i> by the polymerase chain reaction with the universal primer N21," <i>Microbiology (Moscow) (Translation of Mikrobiologiya)</i> (2000) 69(2):229-233. |                |
|                     | KF                    | NISHIKAWA, T. et al., "Reconstitution of active recombinant Shiga toxin (Stx)1 from recombinant Stx1-A and Stx1-B subunits independently produced by <i>E. coli</i> clones," <i>FEMS Microbiol. Lett.</i> (1999) 178:13-18.  |                |
|                     | KG                    | REID, S. M. et al., "Primary diagnosis of foot-and-mouth disease by reverse transcription polymerase chain reaction," <i>Journal of Virological Methods</i> (2000) 89(1-2):167-176.  |                |
|                     | KH                    | REILLY, K. et al., "Design and use of 16S ribosomal DNA-directed primers in competitive PCRs to enumerate proteolytic bacteria in the rumen," <i>Microbiol. Ecol.</i> (2002) 43(2):259-270.  |                |
|                     | KI                    | ROSS, P. L. et al., "Analysis of DNA fragments from conventional and microfabricated PCR devices using delayed extraction MALDI-TOF mass spectrometry," <i>Anal. Chem.</i> (1998) 70(10): 2067-2073.   |                |
|                     | KJ                    | SALA, M. et al., "Ambiguous base pairing of the purine analogue 1-(2-deoxy-β-D-ribofuranosyl)-imidazole-4-carboxamide during PCR," <i>Nucleic Acids Res.</i> (1996) 24(17):3302-6.   |                |
|                     | KK                    | SAUER, S. et al., "A novel procedure for efficient genotyping of single nucleotide polymorphisms," <i>Nucleic Acids Res.</i> (2000) 28(5):E13.   |                |
|                     | KL                    | SCHRAM, K. H., "Mass Spectrometry of Nucleic Acid Components," <i>Biomedical Applications of Mass Spectrometry</i> (1990) 24:203-280.  |                |
|                     | KM                    | SCHULTZ, J. C. et al., "Polymerase chain reaction products analyzed by charge detection mass spectrometry," <i>Rapid Communications in Mass Spectrometry</i> (1999) 13(1):15-20.   |                |
|                     | KN                    | SESHADRI, R. et al., "Differential Expression of Translational Elements by Life Cycle Variants of <i>Coxiella burnetii</i> ," <i>Infect. Immun.</i> (1999) 67(11):6026-6033.   |                |
|                     | KO                    | SHAVER, Y. J. et al., "Variation in 16S-23S rRNA intergenic spacer regions among <i>Bacillus subtilis</i> 168 isolates," <i>Molecular Microbiology</i> (2001) 42(1):101-109.   |                |
|                     | KP                    | TAKAHASHI, H. et al., "Characterization of <i>gyrA</i> , <i>gyrB</i> , <i>grlA</i> and <i>grlB</i> mutations in fluoroquinolone-resistant clinical isolates of <i>Staphylococcus aureus</i> ," <i>J. Antimicrob. Chemother.</i> (1998) 41(1):49-57.                                  |                |
|                     | KQ                    | TONG, J. et al., "Ligation reaction specificities of an NAD <sup>+</sup> -dependent DNA ligase from the hyperthermophile <i>Aquifex aeolicus</i> ," <i>Nucleic Acids Res.</i> (2000) 28(6):1447-1454.  |                |

|                    |                   |                 |            |
|--------------------|-------------------|-----------------|------------|
| Examiner Signature | /Jeffrey Fredman/ | Date Considered | 07/05/2007 |
|--------------------|-------------------|-----------------|------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.88. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet

11 of 12

**Complete If Known**

|                               |                        |
|-------------------------------|------------------------|
| <i>Application Number</i>     | 10/660,996             |
| <i>Filing Date</i>            | 09/12/2003             |
| <i>First Named Inventor</i>   | David J. Ecker         |
| <i>Art Unit</i>               | 1637                   |
| <i>Examiner Name</i>          | Jeffrey Norman Fredman |
| <i>Attorney Docket Number</i> | DIBIS-0002US.P4        |

**NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials * | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.                             | T <sup>2</sup> |
|---------------------|-----------------------|---|----------------|
|                     | KR                    | VAN AERSCHOT, A. et al., "In search of acyclic analogues as universal nucleosides in degenerate probes," <i>Nucleosides &amp; Nucleotides</i> (1995) 14(3-5):1053-1056.   |                |
|                     | KS                    | VAN BAAR, B. L. "Characterisation of bacteria by matrix-assisted laser desorption/ionisation and electrospray mass spectrometry," <i>FEMS Microbiol. Rev.</i> (2000) 24(2):193-219.   |                |
|                     | KT                    | VAN CAMP, G. et al., "Amplification and sequencing of variable regions in bacterial 23S ribosomal RNA genes with conserved primer sequences," <i>Curr. Microbiol.</i> (1993) 27(3):147-151.   |                |
|                     | KU                    | VAN ERT, M. N. et al., "Mass spectrometry provides accurate characterization of two genetic marker types in <i>Bacillus anthracis</i> ." <i>Biotechniques</i> (2004) 37(4):642-651.   |                |
|                     | KV                    | WALTERS, J. J. et al., "Genotyping single nucleotide polymorphisms using intact polymerase chain reaction products by electrospray quadrupole mass spectrometry," <i>Rapid Commun. Mass Spectrom.</i> (2001) 15(18):1752-1759.  |                |
|                     | KW                    | WELHAM, K. J. et al., "The Characterization of Micro-organisms by Matrix-assisted Laser Desorption/Ionization Time-of-flight Mass Spectrometry," <i>Rapid Commun. Mass Spec.</i> (1988) 12:176-180.   |                |
|                     | KX                    | WIDJOJOATMODJO, M. N. et al., "Rapid identification of bacteria by PCR-single-strand conformation polymorphism," <i>J. Clin. Microbiol.</i> (1994) 32(12):3002-3007.  |                |
|                     | KY                    | WOLTER, A. et al., "Negative Ion FAB Mass Spectrometric Analysis of Non-Charged Key Intermediates in Oligonucleotide Synthesis: Rapid Identification of Partially Protected Dinucleoside Monophosphates," <i>Biomed. Environ. Mass Spectrom.</i> (1987) 14:111-116.                         |                |
|                     | KZ                    | WOO, T. H. S. et al., "Identification of <i>Leptospira inadai</i> by continuous monitoring of fluorescence during rapid cycle PCR," <i>Systematic and Applied Microbiology</i> (1998) 21(1):89-96.  |                |
|                     | LA                    | WUNSCHEL, D. et al., "Discrimination among the <i>B. cereus</i> group, in comparison to <i>B. subtilis</i> , by structural carbohydrate profiles and ribosomal RNA spacer region PCR," <i>Systematic and Applied Microbiology</i> (1995) 17(4):625-635.                                     |                |
|                     | LB                    | WUNSCHEL, D. S. et al., "Analysis of double-stranded polymerase chain reaction products from the <i>Bacillus cereus</i> group by electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry," <i>Rapid Communications in Mass Spectrometry</i> (1996) 10(1):29-35. |                |
|                     | LC                    | YAO Z.-P. et al., "Mass Spectrometry-Based Proteolytic Mapping for Rapid Virus Identification," <i>Anal. Chem.</i> (2002) 74(11):2529-2534.   |                |

|                    |                   |                 |            |
|--------------------|-------------------|-----------------|------------|
| Examiner Signature | /Jeffrey Fredman/ | Date Considered | 07/05/2007 |
|--------------------|-------------------|-----------------|------------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.**

~~Substitute for form 1449/PTO~~

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

*(Use as many sheets as necessary)*

Sheet

of 12

**Complete If Known**

|                        |                        |
|------------------------|------------------------|
| Application Number     | 10/660,996             |
| Filing Date            | 09/12/2003             |
| First Named Inventor   | David J. Ecker         |
| Art Unit               | 1637                   |
| Examiner Name          | Jeffrey Norman Fredman |
| Attorney Docket Number | DIBIS-0002US.P4        |

## **NON PATENT LITERATURE DOCUMENTS**

**Examiner  
Signature**

/Jeffrey Fredman/

Date  
Considered

07/05/2007

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

~~DO NOT SEND FEE OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.~~